QC Laboratories

Analytical Results

NJPDES BIOMONITORING REPORT FORM-ACUTE TOXICITY

Permit Number #: Permit Equivalent DSN: 001

Facility name: Kin-Buc Landfill

Facility address: 383 Meadow Road
Edison, NJ

Facility contact person: Glen Grieb
Phone number: 732.561.7600

Acute toxicity laboratory: QC Inc.
1205 Industrial Highway
Southampton, PA 18966

NJ/NELAC certification number: 77166

Test Specifications:

Effluent Type: Final

Test Type: Modified static renewal (24-hour)

Test Results:

Test Start: 01/20/03 Test End: 01/24/03

Test endpoint: LC50

EC50 (%effluent): >100% 95% Confidence Interval: NA

Highest percent mortality in any test concentration: 15.0%

Test organism: Mysid Shrimp (common name) *Mysidopsis bahia* (scientific name)

Quality Control Summary

Control Mortality (%): 0.0

Temperature maintained within 20 +/- 1 °C? Yes

Dissolved Oxygen Levels always greater than 40% saturation? Yes

Two or more concentrations exhibit a trend deviation? No

562190

Certification:

Accuracy of report certified by: _____ 2/11/03
Robert A. Martino, Laboratory Director — Date

1205 Industrial Blvd., P.O. Box 514, Southampton, PA 18966-0514 Phone: 215-355-3900 Fax: 215-355-7231

QC Laboratories

Analytical Results

Test Organism Data:

Test organism source: Aquatox, Inc.

Test Organism Acclimation:

Is the culture water and test dilution water the same, and are the culture water temperature and dilution water temperature identical? No

Mysid, Daphnids and Cladocerans:

Initial number of organisms: 150
Test organism age at start of test (days): 4 days
Culture water source: 40 Fathoms
Culture water salinity: 25 ppt
Culture water temperature: 25°C
Dilution water source: Manasquan Inlet.
Dilution water salinity upon collection: 28.2
Dilution water temperature upon collection: NA
Number of mortalities: < 5%

Test Design:

Number of effluent test concentrations: 5
Number of replicates/test concentration: 4
Number of test organisms/replicate: 5
Volume of liquid in test chambers (liters): 0.20
Flow-through bioassay exchange rate (cycles/day): NA

Effluent sampling:

Plant sampling location: Final effluent just before weir.
Effluent type: Final.
Discharge: Continuous
Effluent sample type: 24 hour composite

Effluent Sample Collection				Initial Parameters In Laboratory					Use in Toxicity Tests		Holding Time
Beginning		*Ending*		*temp*		*d.o*	*Cond*	*Chlorine*			*(first use)*
date	*time*	*date*	*time*	*°C*	*pHi*	*mg/L*	*umhos*	*ppm*	*date(s)*	*time(s)*	*hours*
1/19/03	10:00	1/20/03	9:00	1.30	7.19	9.3	416	< 0.1	1/20/03	13:30	4:30
1/20/03	10:00	1/21/03	9:00	1.60	7.01	12.7	957	< 0.1	1/21/03	13:45	4:45
1/21/03	10:00	1/22/03	9:00	1.40	7.09	12.1	965	< 0.1	1/22/03	13:50	4:50
1/22/03	10:00	1/23/03	9:00	1.20	6.71	12.0	985	< 0.1	1/23/03	14:15	5:15

Testing location: QC Laboratories

Effluent Sample Adjustments

Were any salinity adjustments made? Yes
If yes, specify the source of sea salts, brine or water used: Dry 40 Fathoms (biotechnical grade)

Were any pH adjustments made? Yes.

--------pH / Chlorine Adjustment--------

Sample Used	Volume Adjusted	pH prior to Salting	Salinity ppt	pH after Salting	ml's 0.2N HCl Used	pH after Adjustment	TRC sample	Amt. STS added (mgs)	TRC after Addition

Was the effluent sample filtered in any manner? No
If yes, please specify the mesh size:

Were any adjustments to the level of chlorine made? No.
If yes, specify the dechlorination agent used and the amount of reagent used: NA

Specify the chlorine levels prior to and after addition of the reagent: See data above.

Was an additional control included in the test containing the dechlorination agent? Yes, added to Control B.

Dilution Water:

Effluent receiving water: Raritan River.
Dilution water source: Manasquan Inlet.
If a substitute dilution water was used, had its use been approved by the NJDEP in the acute methodology questionnaire?
Collection location: By Coast Guard station, Manasquan Inlet.
Collection date(s): 01/17/03

	0 hour	24 hour	48 hour	72 hour	96 hour
LC50/EC50 (% effluent)	>100%	>100%	>100%	>100%	>100%

Calculation method: No measurable acute toxicity.

Is the calculated LC50/EC50 valid according to the specifications of the method used? Yes

Miscellaneous:

Were any exposure chambers aerated during the test? No

If yes, specify concentrations and duration, including the lowest percent saturation reached prior to aeration and at what time:

Were the test organisms observed for appearance and behavior at least daily? Yes

QC Laboratories

Analytical Results

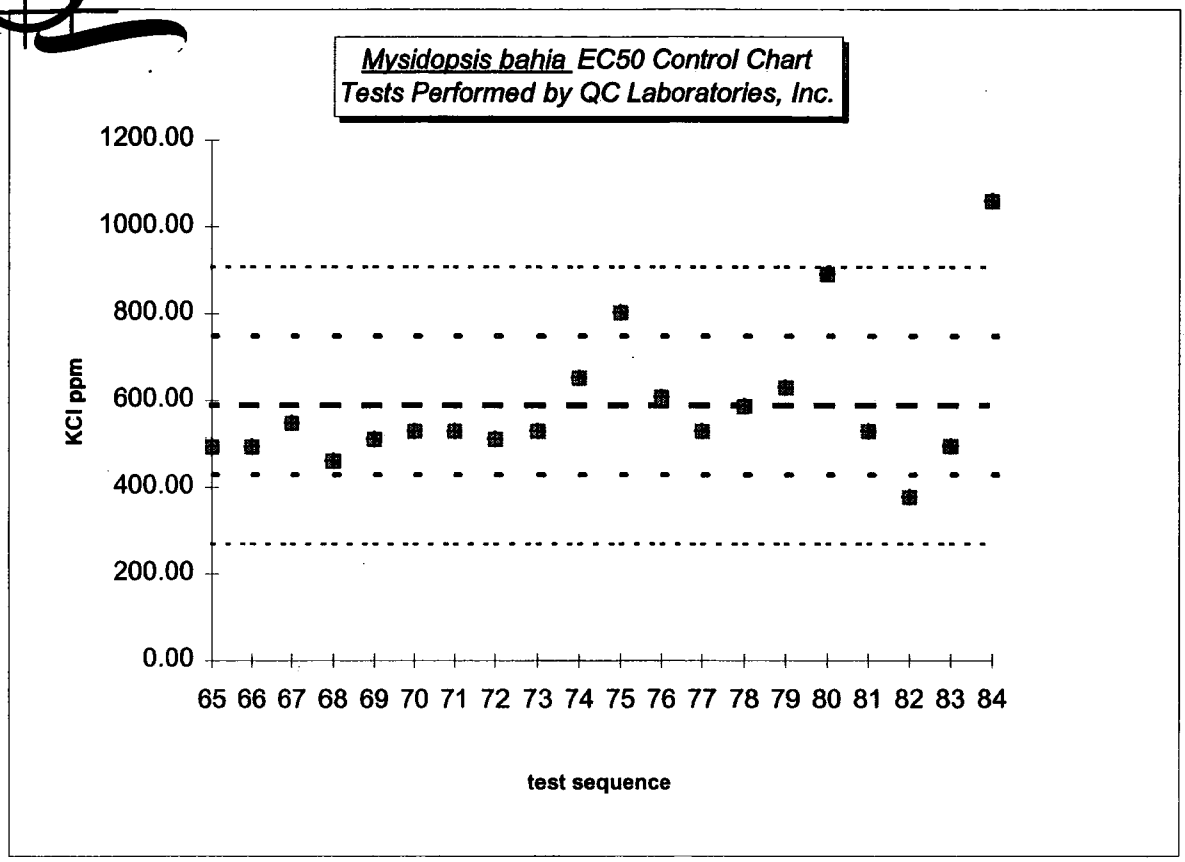
Additional Water Chemistry Parameters

Sample Collection				Dilution Water			100% Effluent		
Beginning		Ending		Alkalinity	Hardness	Ammonia	Alkalinity	Hardness	Ammonia
date	time	date	time	mg/L	mg/L	ppm	mg/L	mg/L	ppm
1/19/03	10:00	1/20/03	10:00	151.0	NA	NA	147.0	NA	NA
1/20/03	10:00	1/21/03	10:00				143.0	NA	NA
1/21/03	10:00	1/22/03	10:00				153.0	NA	NA
1/22/03	10:00	1/23/03	10:00				166.0	NA	NA

Temperature Log

Additional Comments:

QC Laboratories



Date	test number	LC50 ppm	MEAN	UCL 2SD	LCL 2SD	UCL 1SD	LCL 1SD
1/3/02	65	494.82					
1/3/02	66	494.82					
1/14/02	67	549.03					
2/1/02	68	462.00					
2/12/02	69	512.27					
2/25/02	70	530.33					
3/19/02	71	530.33					
4/22/02	72	512.27					
5/13/02	73	530.33					
6/3/02	74	652.90					
6/25/02	75	803.83					
7/16/02	76	609.19					
8/13/02	77	530.33					
8/28/02	78	588.44					
9/24/02	79	630.67					
10/7/02	80	891.91					
10/22/02	81	530.33					
12/4/02	82	378.93					
1/13/03	83	495.71					
1/21/03	84	1060.66	589.46	908.62	270.29	749.04	429.87
	CV	**27.1%**					

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Acute Test Information

Study Number: CP81721 Client: Kinsbur

Protocol: NJ Water Bath/Incubator: 2

Date Initiated: 1-20-03 Time Initiated: 1330

Date Terminated: 1-24-03 Time Terminated: 1405

Test Duration: 24-hour 48-hour 72-hour ~~96-hour~~ Other:

Test Type: 6-hour static renewal ~~24-hour static renewal~~ static-no renewal

flow-through/dilutor used: other:

Test Material: ~~Effluent~~ Receiving Water Non Contact/Contact Cooling Water

Pure Compound: SRT Solution / Lot #:

Other:

Dilution Water: Receiving Waters: Synthetic / Lot #:

Salt Added to Effluent: Y N Test Salinity: 28ppt

Brand of Artificial Salts Used: 40-Fathoms Other:

Test Volume(ml's): 15 25 50 100 200 250 500 1000 other:

Number of Replicates: 2 4 5 10 other: Number of Organisms / Replicate: 5 10 other:

Test Temperature (°C): 20 22 25 other:

Test Species: Pimephales promelas ~~Mysidsopsis bahia~~ Cyprinodon variegatus

Daphnia pulex Ceriodaphnia dubia other:

Source: In house Commercial Supplier: AQUATOX

Lot Number: 12yA00011603 Age at test initiation: 4day Age range: 24hrs

Original Number of Organisms Acclimated:

Acclimation Initiated:
Date: 1/17/03 Time: 1000 Ti °C: 20.3 pHi 7.96 D.O.i 9.6 Sal.i 24.1ppt

Acclimation Terminated:
Date: 1/20/03 Time: 1300 Tf °C: 20.1 pHf 7.84 D.O.f 7.4 Sal.f 28.2ppt

Time Organisms remained in 100% Dilution Water: % Dead:

Time Organisms Added to Test Chambers:

Comments

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MORTALITY/BEHAVIORAL OBSERVATIONS INVERTEBRATE TESTS

Study Number: 981721

OBSERVATION TIME FROM T=0

REP	CONC (%)	0 hours alive	0 hours obs	24 hours alive	24 hours obs	48 hours alive	48 hours obs	72 hours alive	72 hours obs	96 hours alive	96 hours obs
1A	C	5	N	5	N	5	N	5	N	5	N
1B	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1C	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1D	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
2A	40 fullmoons	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
2B	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
2C	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
2D	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
3A	20	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
3B	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
3C	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
3D	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
4A	40	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
4B	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
4C	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
4D	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
5A	60	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
5B	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
5C	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
5D	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
6A	80	↓	↓	↓	↓	↓	↓	4	ID	4	ID
6B	↓	↓	↓	↓	↓	↓	↓	5	N	4	ID
6C	↓	↓	↓	↓	↓	4	ID	4	ID	4	ID
6D	↓	↓	↓	↓	↓	5	N	5	N	5	N
7A	100	↓	↓	↓	↓	4	ID	4	ID	4	ID
7B	↓	↓	↓	↓	↓	5	N	5	N	5	N
7C	↓	↓	↓	↓	↓	4	ID	4	ID	4	ID
7D	↓	↓	↓	↓	↓	5	N	5	N	4	ID
	Signature	MW		MW		MW		MW		MW	
	Date	1-20-03		1-21-03		1-22-03		1-23-03		1-24-03	
	Renewal Time	1330		1345		1350		1415		1405	

Observations:

D *Dead: no appendage movement*
C *Cannibalized*
F *Fed*
I *Immobile*

Comments:

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Physical/Chemical Parameters Sheet

Study Number: 081721

Incubator:

T=0/24 Hrs (x100)

%		temp °C	do mg/l	pH units	Sal ppt	con umhos
control	initial	19.1	7.7	7.83	28.2	436
	final	20.1	7.5	7.96	28.6	453
40	initial	19.2	9.8	8.31	27.1	421
fathoms	final	20.0	8.1	8.16	28.0	443
	initial	19.2	8.3	8.20	27.9	434
20	final	19.9	7.6	8.08	28.3	465
	initial	19.3	8.4	8.39	28.5	440
40	final	19.9	7.9	8.29	29.5	473
	initial	19.4	8.7	8.48	28.6	441
60	final	19.8	8.3	8.16	30.1	474
	initial	19.7	9.0	8.71	28.7	442
80	final	19.8	8.2	8.24	29.5	470
	initial	20.1	9.4	8.73	28.6	441
100	final	19.8	8.1	8.31	29.4	467
	initial					
	final					

	i	f	comments
Initials	MM	TW	CR018/CR018
Date	1-20-03	1-21-03	
Time	1348	1415	

T=24/48 Hrs (x100)

%		temp °C	do mg/l	pH units	Sal ppt	con umhos
control	initial	19.3	7.6	7.87	28.1	437
	final	19.6	6.4	7.83	29.6	456
40	initial	19.1	10.2	8.22	26.4	411
fathoms	final	19.6	7.0	8.07	28.6	442
	initial	19.0	8.2	8.14	28.3	437
20	final	19.6	6.4	7.88	30.7	472
	initial	19.0	8.3	8.30	28.1	435
40	final	19.6	6.6	7.98	30.9	474
	initial	19.0	9.0	8.47	28.0	434
60	final	19.6	6.3	8.01	30.7	470
	initial	19.0	9.5	8.60	28.0	433
80	final	19.6	6.4	8.14	30.4	467
	initial	19.0	10.0	8.71	28.0	434
100	final	19.6	6.8	8.23	30.4	467
	initial					
	final					

	i	f	comments
Initials	TW	KW	CR018/CR021
Date	1-21	1/22/03	
Time	1415	1600	

T=48/72 Hrs (x100)

%		temp °C	do mg/l	pH units	Sal ppt	con umhos
C	initial	19.0	7.6	7.91	28.4	439
	final	19.3	6.9	7.65	30.2	464
40	initial	19.0	9.8	8.10	28.9	433
fathoms	final	19.4	7.1	7.94	29.6	456
	initial	19.0	8.1	8.16	28.8	445
20	final	19.3	6.8	7.88	30.2	464
	initial	19.1	8.4	8.35	28.9	446
40	final	19.2	6.8	7.89	30.2	464
	initial	19.1	8.7	8.45	29.0	448
60	final	19.1	7.0	7.99	30.2	464
	initial	19.1	9.0	8.58	29.1	450
80	final	19.1	6.8	8.03	30.3	465
	initial	19.2	9.3	8.64	29.4	453
100	final	19.1	7.0	8.18	30.3	465
	initial					
	final					

	i	f	comments
Initials	KW	MM	CR018/CR021
Date	1/22/03	1/23/03	
Time	1610	1440	

T=72/96 Hrs (x100)

%		temp °C	do mg/l	pH units	Sal ppt	con umhos
C	initial	19.0	7.8	7.91	28.3	438
	final	19.4	6.8	7.79	28.9	447
40	initial	19.1	9.5	8.04	27.2	421
fathoms	final	19.4	7.0	7.95	28.6	442
	initial	19.2	8.4	8.05	28.6	441
20	final	19.4	7.0	7.98	30.5	468
	initial	19.2	8.4	8.20	28.7	442
40	final	19.4	7.0	7.95	30.9	474
	initial	19.4	8.5	8.39	28.9	444
60	final	19.4	7.0	8.01	30.3	466
	initial	19.6	8.8	8.57	28.6	441
80	final	19.4	6.9	8.08	30.5	473
	initial	19.7	8.9	8.63	28.8	443
100	final	19.4	6.9	8.15	30.7	472
	initial					
	final					

	i	f	comments
Initials	MM	MM	CR021/CR021
Date	1-23-03	1-24-03	
Time	1443	1427	

1/27/03

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QC Laboratories

AQUATIC TOXICOLOGY LABORATORY
CHAIN OF CUSTODY

Study Number: 1981721 Facility Name or Code: Kin-buc

Test Type: ☑Acute ☐Chronic ☐Sediment ☐Pure Compound ☐Other

Sample Number*: ☑D001 ☐D002 ☐D003 ☐E001 ☐E002 ☐E003 ☐E004 ☐E005 ☐E006

If whole sample is comprised of splits, will the splits be homogenized prior to use: Splits to be homogenized:
(note: if split, assign A, B, C...to sample number---add Z if samples are homogenized.)

Description of Sample: ☑Effluent ☐Non-Contact Cooling Water ☐Contact Cooling Water
☐Dilution Waters ☐Groundwater/pump and treat ☐Other:

Location of Sampling: ☐Final (post treatment) ☐Final-Prechlorinated ☐Final-Chlorinated ☐Outfall Outlet
☐Receiving Waters_____ ☐Other:

Sample type: ☐Grab ☐24 Hour Composite ☐_____Hour Composite
☐Time Proportional ☐Flow Proportional ☐Refrigerated/Iced in Field

Sample Collection:

Date/Time Initiated:	Date/Time Terminated:

Was sampler chain-of-custody seal intact at sample retrieval: ☐Yes ☐No

Volume of Sample: _____ Liters / Gallons Container Type: ☐FDA Grade Plastic ☐Glass ☐Stainless Steel

Storage and Transport Conditions: ☐Iced/Cooler Temp. (°C) upon collection: _____
☐Field Collected/Transported to Lab ☐Overnight Courier

Relinquished by Sampler:	Date	Time	Received By:	Date	Time
Relinquished by:	Date	Time	Received By:	Date	Time
Relinquished by:	Date	Time	Received By:	Date	Time

Condition of Sample upon Receipt: ☐Contained ☐Accepted ☐Compromised / Explain below ☐Rejected / Explain below

Sample Refrigerated (date/time/sig.):

Sample Data and Use

Initial Sample Data					Dates used in Toxicity Test		Sample	Sample Terminated	
temp (°C)	pH	D.O. (mg/L)	Cond.	TRC (ppm)	Date(s)	Time(s)	Split ID	Date	Time
18.7	7.91	7.7	43,500	<0.1					

Sample Manipulations: ☐Salted

☐Aerated/Due to: ☐Supersaturation ☐D.O. < 40% of Sat. / final D.O. after aeration:_____mg/L

☐Dechlorinated _____ mgs anhydrous sodium thiosulfate used per liter (show math on below)

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QC Laboratories

AQUATIC TOXICOLOGY LABORATORY
CHAIN OF CUSTODY

Study Number: L981721 Facility Name or Code: K-m-bvc

Test Type: ☑Acute ☐Chronic ☐Sediment ☐Pure Compound ☐Other

Sample Number*: ☐D001 ☐D002 ☐D003 ☑E001 ☐E002 ☐E003 ☐E004 ☐E005 ☐E006

If whole sample is comprised of splits, will the splits be homogenized prior to use: Splits to be homogenized:
(note: If split, assign A, B, C...to sample number---add Z if samples are homogenized.)

Description of Sample: ☑Effluent ☐Non-Contact Cooling Water ☐Contact Cooling Water
☐Dilution Waters ☐Groundwater/pump and treat ☐Other:

Location of Sampling: ☑Final (post treatment) ☐Final-Prechlorinated ☐Final-Chlorinated ☐Outfall Outlet
☐Receiving Waters_____ ☐Other:

Sample type: ☐Grab ☑24 Hour Composite ☐_____Hour Composite
☐Time Proportional ☐Flow Proportional ☐Refrigerated/Iced in Field

Sample Collection:

Date/Time Initiated:	Date/Time Terminated:
1/19/03 1000	1/20/03 0900

Was sampler chain-of-custody seal intact at sample retrieval? ☐Yes ☐No

Volume of Sample: 3½ Liters / Gallons Container Type: ☑EDA Grade Plastic ☐Glass ☐Stainless Steel

Storage and Transport Conditions: ☑Iced/Cooler Temp. (°C) upon collection: 14.3
☐Field Collected/Transported to Lab ☐Overnight Courier

Relinquished by Sampler:	Date	Time	Received By:	Date	Time
Mark Turner	1/20/03	1205	Mon Valent	1-20-03	80
Relinquished by:	Date	Time	Received By:	Date	Time
Relinquished by:	Date	Time	Received By:	Date	Time

Condition of Sample upon Receipt: ☑Contained ☑Accepted ☐Compromised / Explain below ☐Rejected / Explain below

Sample Refrigerated (date/time/sig.):

Sample Data and Use

Initial Sample Data					Dates used in Toxicity Test		Sample	Sample Terminated	
temp (°C)	pH	D.O. (mg/L)	Cond.	TRC (ppm)	Date(s)	Time(s)	Split ID	Date	Time
1.3	7.19	9.7	415	0.0	1-20-03	1330		1-21-03	800

Sample Manipulations: ☐Salted

☐Aerated/Due to: ☐Supersaturation ☐D.O. < 40% of Sat. / final D.O. after aeration:_____mg/L

☐Dechlorinated _____ mgs anhydrous sodium thiosulfate used per liter (show math on below)

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QC Laboratories

AQUATIC TOXICOLOGY LABORATORY
CHAIN OF CUSTODY

Study Number: C981721 Facility Name or Code: Kinbuc

Test Type: ☑Acute ☐Chronic ☐Sediment ☐Pure Compound ☐Other

Sample Number*: ☐D001 ☐D002 ☐D003 ☐E001 ☑E002 ☐E003 ☐E004 ☐E005 ☐E006

If whole sample is comprised of splits, will the splits be homogenized prior to use: Splits to be homogenized:
(note: if split, assign A, B, C...to sample number---add Z if samples are homogenized.)

Description of Sample: ☑Effluent ☐Non-Contact Cooling Water ☐Contact Cooling Water
☐Dilution Waters ☐Groundwater/pump and treat ☐Other:

Location of Sampling: ☑Final (post treatment) ☐Final-Prechlorinated ☐Final-Chlorinated ☐Outfall Outlet
☐Receiving Waters_____ ☐Other:

Sample type: ☐Grab ☑24 Hour Composite ☐_____Hour Composite
☐Time Proportional ☐Flow Proportional ☐Refrigerated/Iced in Field

Sample Collection:

Date/Time Initiated:	Date/Time Terminated:
1/20/03 1000	1/21/03 0900

Was sampler chain-of-custody seal intact at sample retrieval: ☐ ☑Yes ☐No

Volume of Sample: 3½ Liters / (Gallons) Container Type: ☑FDA Grade Plastic ☐Glass ☐Stainless Steel

Storage and Transport Conditions: ☑Iced/Cooler Temp. (°C) upon collection: 14.1
☑Field Collected/Transported to Lab ☐Overnight Courier

Relinquished by Sampler:	Date	Time	Received By:	Date	Time
Mark Turner	1/21/03	1235	Mon Valley	1/21/03	1235
Relinquished by:	Date	Time	Received By:	Date	Time
Relinquished by:	Date	Time	Received By:	Date	Time

Condition of Sample upon Receipt: ☑Contained ☑Accepted ☐Compromised / Explain below ☐Rejected / Explain below

Sample Refrigerated (date/time/sig.):

Sample Data and Use

Initial Sample Data					Dates used in Toxicity Test		Sample	Sample Terminated	
temp (°C)	pH	D.O. (mg/L)	Cond.	TRC (ppm)	Date(s)	Time(s)	Split ID	Date	Time
1.6	7.01	12.7	957	0.0	1-21-03	1345		1-22-03	800

Sample Manipulations: ☑Salted

☐Aerated/Due to: ☐Supersaturation ☐D.O. < 40% of Sat. / final D.O. after aeration:_____mg/L

☐Dechlorinated _____ mgs anhydrous sodium thiosulfate used per liter (show math on below)

1205 Industrial Blvd., P.O. Box 514, Southampton, PA 18966-0514 Phone: 215-355-3900 Fax: 215-355-7231

QC Laboratories

AQUATIC TOXICOLOGY LABORATORY
CHAIN OF CUSTODY

Study Number: 981721 Facility Name or Code: Kinbuc

Test Type: ☑Acute ☐Chronic ☐Sediment ☐Pure Compound ☐Other

Sample Number*: ☐D001 ☐D002 ☐D003 ☐E001 ☐E002 ☑E003 ☐E004 ☐E005 ☐E006

If whole sample is comprised of splits, will the splits be homogenized prior to use: Splits to be homogenized:
(note: If split, assign A, B, C...to sample number---add Z if samples are homogenized.)

Description of Sample: ☑Effluent ☐Non-Contact Cooling Water ☐Contact Cooling Water
☐Dilution Waters ☐Groundwater/pump and treat ☐Other:

Location of Sampling: ☑Final (post treatment) ☐Final-Prechlorinated ☐Final-Chlorinated ☐Outfall Outlet
☐Receiving Waters_____ ☐Other:

Sample type: ☐Grab ☑24 Hour Composite ☐_____Hour Composite
☐Time Proportional ☐Flow Proportional ☐Refrigerated/Iced in Field

Sample Collection:

Date/Time Initiated:	Date/Time Terminated:
1/21/03 1000	1/22/03 0900

Was sampler chain-of-custody seal intact at sample retrieval: ☐Yes ☐No

Volume of Sample: 2½ Liters / ☑Gallons Container Type: ☑FDA Grade Plastic ☐Glass ☐Stainless Steel

Storage and Transport Conditions: ☑Iced/Cooler Temp. (°C) upon collection: 14.3
☑Field Collected/Transported to Lab ☐Overnight Courier

Relinquished by Sampler:	Date	Time	Received By:	Date	Time
[signature]	1/22/03	1220	[signature]	1-22-03	1220
Relinquished by:	Date	Time	Received By:	Date	Time
Relinquished by:	Date	Time	Received By:	Date	Time

Condition of Sample upon Receipt: ☑Contained ☑Accepted ☐Compromised / Explain below ☐Rejected / Explain below

Sample Refrigerated (date/time/sig.):

Sample Data and Use

Initial Sample Data					Dates used in Toxicity Test		Sample	Sample Terminated	
temp (°C)	pH	D.O. (mg/L)	Cond.	TRC (ppm)	Date(s)	Time(s)	Split ID	Date	Time
1.4	7.09	12.1	9.65	0.0	1-22-03	1350		1-23-03	800

Sample Manipulations: ☐Salted

☐Aerated/Due to: ☐Supersaturation ☐D.O. < 40% of Sat. / final D.O. after aeration:_____mg/L

☐Dechlorinated _____ mgs anhydrous sodium thiosulfate used per liter (show math on below)

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QC Laboratories

AQUATIC TOXICOLOGY LABORATORY
CHAIN OF CUSTODY

Study Number: L981721 Facility Name or Code: Kinbul

Test Type: ☑Acute ☐Chronic ☐Sediment ☐Pure Compound ☐Other

Sample Number*: ☐D001 ☐D002 ☐D003 ☐E001 ☐E002 ☐E003 ☑E004 ☐E005 ☐E006

If whole sample is comprised of splits, will the splits be homogenized prior to use: Splits to be homogenized:
(note: if split, assign A, B, C...to sample number---add Z if samples are homogenized.)

Description of Sample: ☑Effluent ☐Non-Contact Cooling Water ☐Contact Cooling Water
☐Dilution Waters ☐Groundwater/pump and treat ☐Other:

Location of Sampling: ☑Final (post treatment) ☐Final-Prechlorinated ☐Final-Chlorinated ☐Outfall Outlet
☐Receiving Waters_____ ☐Other:

Sample type: ☐Grab ☑24 Hour Composite ☐_____Hour Composite
☐Time Proportional ☐Flow Proportional ☐Refrigerated/Iced in Field

Sample Collection:

Date/Time Initiated:	Date/Time Terminated:
1/22/03 1080	1/23/03 0900

Was sampler chain-of-custody seal intact at sample retrieval? ☐Yes ☐No

Volume of Sample: 3½ Liters / ☑Gallons Container Type: ☑EDA Grade Plastic ☐Glass ☐Stainless Steel

Storage and Transport Conditions: ☑Iced/Cooler Temp. (°C) upon collection: 13.9
☑Field Collected/Transported to Lab ☐Overnight Courier

Relinquished by Sampler:	Date	Time	Received By:	Date	Time
Mel Turner	1/23/03	1245	Mon Valent	1-23-03	1245
Relinquished by:	Date	Time	Received By:	Date	Time
Relinquished by:	Date	Time	Received By:	Date	Time

Condition of Sample upon Receipt: ☑Contained ☑Accepted ☐Compromised / Explain below ☐Rejected / Explain below

Sample Refrigerated (date/time/sig.):

Sample Data and Use

Initial Sample Data					Dates used in Toxicity Test		Sample	Sample Terminated	
temp (°C)	pH	D.O. (mg/L)	Cond.	TRC (ppm)	Date(s)	Time(s)	Split ID	Date	Time
1.2	6.71	12.0	9.85	0.0	1-23-03	1415		1-24-03	800

Sample Manipulations: ☑Salted

☐Aerated/Due to: ☐Supersaturation ☐D.O. < 40% of Sat. / final D.O. after aeration:_____mg/L

☐Dechlorinated _____ mgs anhydrous sodium thiosulfate used per liter (show math on below)

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